Case 2820

Turbo politus Linnaeus, 1758 (currently *Melanella polita*; Mollusca, Gastropoda): proposed conservation of usage of the specific name, so conserving the specific name of *Buccinum acicula* Müller, 1774 (currently *Cecilioides acicula*)

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Abstract. The purpose of this application is to conserve the current universal understanding and usage of the specific name of the European prosobranch mollusc *Turbo politus* Linnaeus, 1758 (family EULIMIDAE Philippi, 1853) for which a neotype has been designated. Recently discovered syntypes of *T. politus* are conspecific with *Buccinum acicula* Müller, 1774, the type species of *Cecilioides* Férussac, 1814 (Pulmonata, family FERUSSACIIDAE Bourguignat, 1883). *C. acicula* is found around the Mediterranean and in western Europe, and has been introduced into the eastern U.S.A. and Bermuda. Both the names *Cecilioides* and *B. acicula* have been placed on Official Lists (Opinion 335; March 1955).

1. Linnaeus (1758, p. 767) described *Turbo politus* from 'M[are] Mediterraneo'. He did not refer here (the 10th edition of his *Systema Naturae*) or later (the 12th edition of 1767) to the existence of a specimen. The name was used by early authors (Pulteney, 1799, p. 49; Montagu, 1808, p. 398; Jeffreys, 1867, pp. 167, 203, and others) for various gastropod species of the family EULIMIDAE Philippi, 1853. Martel (1905, p. 328), followed by Dautzenberg (1927, p. 162), pointed out that authors were confusing different taxa under the name and that *politus* referred exclusively to a small Mediterranean species (see BZN **49**: 113, paras. 4 and 6). Martel noted that Linnaeus's description was brief but clear, and that the stated habitat and size ('Testa Gr[ani] hordei [barley grain] magnitudine') applied only to *politus*. In recent times the species has been placed in *Melanella* Bowdich, 1822, *Eulima* Risso, 1826 or *Balcis* Leach in Gray, 1847. A search by one of us (A.W.) in the Linnean Society collection in London and by Prof A. Holm, former curator at the Zoological Museum of the University of Uppsala, failed to find a Linnaean specimen. Warén (1988, pp. 20, 21, figs. 13, 14) discussed the identity and synonymy of *politus*, and to remove any ambiguity in the use of the name described and figured a specimen (catalogue no. 1071 in the Zoological Museum, Uppsala) from the Golfe de Gabes, Tunisia, which he designated the neotype. Warén also designated (p. 20) the same specimen as the neotype of *Eulima intermedia* Cantraine, 1835 (p. 390), the type species of

Polygireulima Sacco, 1892 (p. 592), and of *Rissoa sinuosa* Scacchi, 1836 (p. 15, figs. 26, 27), thereby rendering the latter two unused and untypified specific names junior objective synonyms of *Turbo politus*.

2. The mollusc material in Linnaeus's collection housed in the Linnean Society, London was listed by Hanley (1855) and by Dance (1967). Hanley (p. 354) noted: 'My earlier set of notes alludes to the presence in the collection of a wretched example of *E[ulima] polita* ... but I have failed in detecting it in a more recent examination'. He erroneously recorded that Linnaeus had denoted a specimen in his possession in 1758, which was not so denoted in 1767. Dance (1966, p. 22) doubted the existence of such a specimen. The study by Dodge (1959) of *Turbo* species described by Linnaeus remained incomplete and did not include *politus*.

3. Notes in a manuscript by Linnaeus intended for a 13th edition of *Systema Naturae*, kept in the Linnean Society, recorded that specimens of *Turbo politus* were procured by Erik Brander, the Swedish Consul in Algiers from 1753–1765, who had instructions to collect natural history objects for Queen Lovisa Ulrika (see Dance, 1967, p. 16). Specimens originating from Brander were exceptional among those sent to Linnaeus in having reliable localities (Dance, 1967, p. 16). Linnaeus relied on the Queen's collection for the descriptions of molluscs in both the 10th (1758) and 12th (1767) editions of his *Systema Naturae* and in 1764 he published a catalogue of the specimens. This was mostly written in 1751–1752 and had been ready for publication since 1754; it was intended that it should be illustrated but the preparation of the plates took too long (see Lovén, 1887, p. 41) and Linnaeus obtained the Queen's permission to publish the catalogue privately. The plates which were produced remain, still unpublished, in the archives of the Swedish Academy of Sciences, Stockholm, where Warén examined them. Neither the catalogue nor the plates mentions *Turbo politus*.

4. Until a few years before he died in 1778 Linnaeus occasionally attended and curated the Queen's collection. On his death the care of the collection passed to Olof Swartz, professor of botany and natural history at the School of Surgeons in Stockholm. He had lists printed with names used in the 12th edition of *Systema Naturae* and these names were then glued on the shells (see Lovén, 1887, p. 47). N.H. Odhner (MS) recorded that the names were 'in many cases even pasted on the wrong subjects'. After the Queen's death duplicate (only?) specimens were sold (see Wallin, 1992, p. 224). Finally, in 1803 the collection was given to the University of Uppsala by King Gustav IV Adolf (see Lönnberg, 1916). Swartz became curator (1808–1818) of the museum of the Royal Academy of Natural Sciences in Stockholm (now the Naturhistoriska Riksmuseet) and there is good reason (Odhner, MS and Wallin, 1992) to assume that specimens were transferred from the Queen's collection in Uppsala to the Academy museum in Stockholm.

5. After the transfer to Uppsala the collection was curated by Prof Carl Peter Thunberg, a student of Linnaeus's, who added his own handwritten labels and catalogued the collection (Thunberg, 1804). *Turbo politus* was not listed in this catalogue. At this time and even after Thunberg's death in 1828, specimens from the Queen's collection were joined to those in Uppsala by donations from collectors who had bought them (see para. 4 above). The printed labels attached by Swartz have been used to identify these secondarily incorporated specimens as original material. The Uppsala collection includes putative types of 637 mollusc species. The Swartz

labels mean that it is safer to assume they are Linnaean specimens than is the case with the material in the Linnean Society in London, which was much contaminated by Linnaeus's son and during the time (1784–1828) that it was owned by J.E. Smith (see Hanley, 1855, pp. 2–3 and Dance, 1967, pp. 3–4).

6. During the recent preparation of a list of Linnaeus's type material in Uppsala (Wallin, 1991), two lots of specimens labelled [*Turbo*] *politus* were found among the pulmonate molluscs. The locality 'M. Mediterraneo (collected by E. Brander and for Queen Lovisa Ulrika)' is given. The shells are glued to two small pieces of the same kind of paper, and neither the shells nor the paper show any sign of having been reattached. One lot (catalogue no. UUZM 1184a-b) is accompanied by a label printed by Swartz (see para. 4 above). The second lot (no. UUZM 1185a-b) has a handwritten label (not prepared by Thunberg; see para. 5 above), glued in the same way and probably pre-Thunberg. There is good reason to believe that these are Linnaeus's hitherto uncatalogued syntypes of *T. politus*. Examination of the specimens, however, has shown that they are conspecific with the pulmonate *Buccinum acicula* Müller, 1774 (p. 150), the type species by monotypy (as '*Bulimus acicula* Brug.', i.e. Bruguière, [1789], p. 311, who referred to Müller) of *Cecilioides* Férussac, 1814 (p. 48; family FERUSSACIIDAE Bourguignat, 1883). Both the names *Cecilioides* and *B. acicula* Müller have been placed on Official Lists (Opinion 335; March 1955).

7. The family EULIMIDAE includes more than 4000 species, worldwide, which are almost all parasitic on echinoderms. The use of the specific name *politus* Linnaeus, 1758 for a Mediterranean eulimid has been stable for a long time. Recent examples of its use include Nordsieck (1982, p. 169), D'Angelo & Gargiullo (1978, p. 118), Sabelli, Giannuzzi-Savelli & Bedulli (1990, pp. 34, 184) and Cossignani, Cossignani, Di Nisio & Passamonti (1992, fig. 129). The host of *politus* remains unknown. *Cecilioides acicula* (Müller, 1774) is a terrestrial species but is frequently found washed ashore after being carried out to sea by flooding streams (see Kerney, Cameron & Jungbluth, 1983, p. 202). It is widely distributed around the Mediterranean. The name *acicula* has been used consistently for the taxon since its introduction (the nomenclatural history was summarized by Kennard & Woodward, 1926, pp. 281–283) and is one of the most well known and universally accepted names among European pulmonates (see, for example, the recent publications of Frömming, 1954, pp. 70–72; Grossu, 1955, pp. 338, 339, fig. 188; Hässlein, 1966, p. 60; Evans, 1972; Pintér, Richnovszky & Szigethy, 1979, pp. 98, 258; Pfleger & Chatfield, 1983, pp. 203, 204; Gittenberger, Backhuys & Ripken, 1984, p. 117; Boato, Bodon & Giusti, 1985, p. 308; Abbott, 1989, p. 84; Robles, 1990, p. 479). Acceptance of the recently discovered syntypes of *politus* would necessitate using *politus* as the valid name for the species now called *acicula*, with *acicula* being a junior subjective synonym. Another name would be required for *politus* as currently understood. These changes would result in considerable and unnecessary confusion in the nomenclature in two separate families. It is thus very desirable that the interpretation of *politus* based on the neotype should be maintained.

8. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous fixations of type specimen for the nominal species *Turbo politus* Linnaeus, 1758 and to confirm the neotype designation by Warén (1988);

(2) to place on the Official List of Specific Names in Zoology the name *politus* Linnaeus, 1758, as published in the binomen *Turbo politus* and as defined by the neotype designated by Warén (1988), confirmed in (1) above;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the names:
   (a) *intermedia* Cantraine, 1835, as published in the binomen *Eulima intermedia* (a junior objective synonym of the specific name of *Turbo politus* Linnaeus, 1758);
   (b) *sinuosa* Scacchi, 1836, as published in the binomen *Rissoa sinuosa* (a junior objective synonym of the specific name of *Turbo politus* Linnaeus, 1758).

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